Applicant: Juergen GRAS et al.

Docket No. R.307336

Preliminary Amdt.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

Claims 1-10 (Canceled).

11. (New) In an apparatus for feeding fuel from a tank to an internal combustion engine,

having a feed pump, a pressure line leading from the feed pump to the engine, a check valve

located in the pressure line downstream of the feed pump, and a pressure sensor fluidically

communicating with the pressure line, the improvement wherein the pressure sensor is

operatively connected to the pressure line downstream of the feed pump and upstream of the

check valve.

12. (New) The apparatus in accordance with claim 11, wherein the feed pump and the

pressure sensor are located in the tank.

13. (New) The apparatus in accordance with claim 11, wherein the pressure sensor has a

temperature sensor.

14. (New) A method for pressure detection, employing an apparatus for feeding fuel from a

tank to an internal combustion engine, a feed pump, a pressure line leading from the feed

Page 7 of 11

Applicant: Juergen GRAS et al.

Docket No. R.307336 Preliminary Amdt.

pump to the engine, a check valve located in the pressure line downstream of the feed pump,

and a pressure sensor fluidically communicating with the pressure line, the method

comprising operatively connecting the pressure sensor to the pressure line downstream of the

feed pump and upstream of the check valve, and using the pressure sensor for pressure

detection in the pressure line and for pressure detection in the tank.

15. (New) The method in accordance with claim 14, wherein the feed pump and the pressure

sensor are located in the tank.

16. (New) The method in accordance with claim 4, wherein the pressure sensor produces a

measurement signal, and wherein the measurement signal is used in an engine controller as a

controlled variable for regulating the feed pump and/or for a leak diagnosis in the pressure

line and/or for a tank leak diagnosis.

17. (New) The method in accordance with claim 14, wherein, in the tank leak diagnosis, the

course of pressure over time in the tank is measured.

18. (New) The method in accordance with claim 4, characterized in that in the tank leak

diagnosis, it is concluded that there is a leak in the tank if, after a predetermined diagnosis

time, a pressure change is measured that is greater than a predetermined pressure change, and

there is an overpressure or underpressure in the tank before the beginning of the tank leak

diagnosis.

Page 8 of 11

Applicant: Juergen GRAS et al.

Docket No. R.307336 Preliminary Amdt.

19. (New) The method in accordance with claim 14, wherein it is concluded that there is a

leak in the tank if, after a predetermined diagnosis time, a pressure change is measured that is

less than a predetermined pressure change, and there is atmospheric pressure in the tank

before the beginning of the tank leak diagnosis.

20. (New) The method in accordance with claim 14, wherein in the pressure line leak

diagnosis, it is concluded that there is a leak in the pressure line downstream of the check

valve, if the measurement signal of the pressure sensor drops below a predetermined value.